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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,470	01/22/2004	Valery M. Dubin	110348-134848	6669

25943 7590 04/09/2008
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EXAMINER

LAMB, BRENDA A

ART UNIT	PAPER NUMBER
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1792

MAIL DATE	DELIVERY MODE
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04/09/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/763,470	Applicant(s) DUBIN ET AL.	
	Examiner Brenda A. Lamb	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/7/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 5-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Dubin et al 2003/0134047.

Dubin et al teaches a system which is comprised of the following elements: a chamber as defined by the nozzle 16 applies a plating solution to plate a wafer by

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spraying thereon; a plurality of tanks to separately hold electroless plating component; and a piping system having a plurality of segments, including a plurality of in-line heaters for a subset of the segments and piping system provides the following steps to occur substantially before application of the plating solution to the wafer: separate routing of the components of the plating solution, in-line heating and mixing. Dubin et al plurality of tanks is capable of holding coating material within the scope of the claim since it teaches every claimed element of the apparatus. Note it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). With respect to claims 6-7, Dubin et al plurality of tanks is capable of holding coating material within the scope of the claim since it teaches every claimed element of the apparatus. Note it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). In any event, Dubin et al teaches that the tanks contain plating components within the scope of the claim (see column 4 lines 14-37 and column 6 line 22 to column 7 line 32). With respect to claims 6-7, Dubin et al

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plurality of tanks is capable of storing coating material within the scope of the claim since it teaches every claimed element of the apparatus. Note it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). In any event, Dubin et al teaches that the tanks contain plating components within the scope of the claim (see column 4 lines 14-37 and column 6 line 22 to column 7 line 32). With respect to claim 8, Dubin et al in-line heaters are capable of heating coating within the scope of the claim given the teaching at column 6 line 22 to column 7 line 32 of operating the plating process at temperature within the scope of the claim.

Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segawa et al 6,638,564 in view of Yokoyama et al 2004/0045502.

Segawa et al teaches a system which is comprised of the following elements: a chamber as defined by the nozzle 16 applies a plating solution to plate a wafer by spraying thereon; a plurality of tanks to separately hold electroless plating component; and a piping system having a plurality of segments and piping system provides the following steps to occur substantially before application of the plating solution to the wafer: separate routing of the components of the plating solution, in-line heating and mixing. Segawa et al walls of the plurality of tanks is capable of holding coating material within the scope of the claim. Note it has been held that a recitation with respect to the

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manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). Segawa et al fails to teach the plurality of segments includes a plurality of in-line heaters. However, it would have been obvious to modify by substituting its heating means in the Segawa et al apparatus, (in tank heating system (elements 52a,52b,53a,53b)) with an in-line heating means for heating the coating material to desired temperature such as taught by Yokoyama et al since Yokoyama et al teaches the advantage of using in-line heaters to heat the plating over in supply tank heaters (see paragraph 0169). With respect to claims 6-7, Dubin et al plurality of tanks is capable of holding coating material within the scope of the claim since it teaches every claimed element of the apparatus. Note it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). With respect to claims 6-7, Segawa et al plurality of tanks is capable of storing coating material within the scope of the claim since it teaches every claimed element of the apparatus. Note it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the

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claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). With respect to claim 8, Segawa et al as modified with in-line heaters are capable of heating coating within the scope of the claim (see Yokoyama et al at paragraph 00169 and Segawa et al at column 4 lines 6-7).

Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segawa et al 6,638,564 in view of Henry, Jr 3,727,680, Talmey et al 2,941,902, Morcos 6,500,482 and Shacham-Diamand et al 6,065,424.

Segawa et al teaches a system which is comprised of the following elements: a chamber as defined by the nozzle 16 applies a plating solution to plate a wafer by spraying thereon; a plurality of tanks to separately hold electroless plating component; and a piping system having a plurality of segments and piping system provides the following steps to occur substantially before application of the plating solution to the wafer: separate routing of the components of the plating solution, in-line heating and mixing. Segawa et al walls of the plurality of tanks is capable of holding coating material within the scope of the claim. Note it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). Segawa et al fails to teach

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the plurality of segments includes a plurality of in-line heaters. However, it would have been obvious to modify by substituting its heating means in the Segawa et al apparatus, (in tank heating system (elements 52a,52b,53a,53b)) with an in-line heating means for heating the coating material to desired temperature since the use of in-line heaters to heat the plating solution prior to its supply to the plating tank is known as taught by Henry, Jr, Talmey et al, Morcos and Shacham-Diamand et al for the obvious advantage of greater control of the plating process by controlling the temperature of the fluid supplied to the plating chamber. With respect to claims 6-7, Segawa et al plurality of tanks is capable of holding coating material within the scope of the claim since it teaches every claimed element of the apparatus. Note it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). With respect to claims 6-7, Segawa et al plurality of tanks is capable of storing coating material within the scope of the claim since it teaches every claimed element of the apparatus. Note it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464,

1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). With respect to claim 8, Segawa et al as modified with in-line heaters are capable of heating coating within the scope of the claim (see Segawa et al at column 4 lines 6-7).

Applicant's arguments filed 1/7/2008 have been fully considered but they are not persuasive.

The declarations filed on 1/7/2008 under 37 CFR 1.131 are noted but these declarations are defective since they have not been signed by the second inventor-Chin-Chang Cheng.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda A. Lamb whose telephone number is (571) 272-1231. The examiner can normally be reached on Monday-Tuesday and Thursday. The examiner can also be reached on alternate Wednesdays and Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton, can be reached on 571-272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Brenda A Lamb
Examiner
Art Unit 1734

/Brenda A Lamb/

Primary Examiner, Art Unit 1792